



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|--------------------------|----------------------|---------------------|------------------|
| 10/074,834 | 02/13/2002 | Edward Raynes Eaton | TH1871Y | 6354 |
| 23632 SHELL OIL CO | 7590 06/06/200 OMPANY | EXAMINER | | |
| P O BOX 2463 | | OGDEN JR, NECHOLUS | | |
| HOUSTON, TX 772522463 | | | ART UNIT | PAPER NUMBER |
| | | | 1751 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 06/06/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | | Application No. | Applicant(s) | | | |
|---|--|---|---|--|--|--|
| | | 10/074,834 | EATON ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | | Necholus Ogden | 1751 | | | |
| Period fo | The MAILING DATE of this communication app or Reply | ears on the cover sheet with | the correspondence address | | | |
| WHIC - External after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in a sions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | TE OF THIS COMMUNICA 6(a). In no event, however, may a rep ill apply and will expire SIX (6) MONTH cause the application to become ABA | ATION. By be timely filed HS from the mailing date of this communication. NDONED (35 U.S.C. § 133) | | | |
| Status | | | | | | |
| 1) | Responsive to communication(s) filed on 14 Ma | arch 2007. | | | | |
| | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Dispositi | on of Claims | | | | | |
| 4)⊠ | Claim(s) <u>1 and 4-6</u> is/are pending in the applica | ation. | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| | 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ | Claim(s) 1 and 4-6 is/are rejected. | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | |
| 8)[| Claim(s) are subject to restriction and/or | election requirement. | • | | | |
| Application Papers | | | | | | |
| 9) | The specification is objected to by the Examiner | : | | | | |
| | The drawing(s) filed on is/are: a) acce | | the Examiner. | | | |
| | Applicant may not request that any objection to the o | • | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachmen | (s) | | | | | |
| | e of References Cited (PTO-892) | | mmary (PTO-413) | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | |

Application/Control Number: 10/074,834

Art Unit: 1751

Response to Amendment

Page 2

Claims 1 and 4-6 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fitzpatrick et al (4,617,490) are withdrawn in view of applicant's arguments and Declaration

- 1. Claims 1 and 6 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP (06026979) are withdrawn in view of applicant's arguments and Declaration.
- 2. Claims 1 and 4-6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/886,298.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 4-6 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 5. Claim 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 6. The aforementioned claims depend from claim 3, which has been previously canceled. Appropriate corrections are required.

Application/Control Number: 10/074,834

Art Unit: 1751

Page 3

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Arntz et al (5,015,789).

Arntz et al disclose a method of preparing 1,3 propanediol by hydrating acrolein in the presence of an acidic cation exchanger resin to form 3-hydroxypropionaldehyde, by reacting acrolein and water (see claim 1).

As Arntz et al disclose all of the instantly required it is considered anticipatory.

10. In the alternative, Arntz et al is silent with respect to the electrical resistivity of greater than 250; a boiling point of greater than 90 degrees Celsius; a thermal conductivity of greater than 0.4W W/m-k; a viscosity of less than 1cPs at 80 degrees Celsius and less than 6 cPs at 0 degrees Celsius; a heat capacity of greater than 3KJ/kg-K; and a corrosion of aluminum heat rejecting surface capacity as measured by ASTM D-4340 of less than 0.1 mg/cm2/week. However, it would have been inherent to the compositions disclosed in Arntz et al to comprise the characteristics disclosed

Art Unit: 1751

above because Arntz et al disclose the same compound as claimed in the instant application, wherein one of ordinary skill in the art would expect similar characteristics.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Necholus Ogden whose telephone number is 571-272-1322. The examiner can normally be reached on M-T, Th-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner

Art Unit 1751

No 5-31-2007 Application/Control Number: 10/074,834

Art Unit: 1751

Page 5